Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

Claim 1 (currently amended): An endovascular fastener applicator for endoluminally fastening a prosthetic graft to a vessel with at least one fastener comprising:

a tubular body configured for positioning within a vessel;

an expandable portion disposed adjacent a distal end of the tubular body and being expandable to support a prosthetic in contact with an inner surface of a vessel;

a fastener applying driving head rotatably mounted on the distal end of the tubular body and movable between a load position longitudinally aligned with the tubular body and a firing position oriented approximately 90° with respect to the tubular body; and

a handle assembly mounted in a proximal end of the tubular body-; and a storage chamber extending from a distal end of the expandable portion.

Claim 2 (original): The applicator as recited in claim 1, wherein the handle assembly has a first control to expand the expandable portion.

Claim 3 (original): The applicator as recited in claim 1, wherein the handle assembly includes a second control to pivot the fastener driving head to the firing position.

Claim 4 (original): The applicator as recited in claim 3, wherein the second control also rotates the fastener driving head about the longitudinal axis of the tubular body.





Claim 5 (original): The applicator as recited in claim 3, wherein the handle assembly includes a third control to move a fastener out of the fastener driving head and into tissue.

Claim 6 (original): The applicator as recited in claim 5, wherein the third control further moves a fastener carrying slider into engagement with tissue.

Claim. (original): The applicator as recited in claim 1, wherein the fastener is a helical coil fastener.

Claim 8 (canceled)

Claim (currently amended): The applicator as recited in claim 36, wherein the third control is connected to the fastener carrying slider by a wire formed of a shape memory material.

Claim 10 (original): The applicator as recited in claim 1, wherein the fastener is a conventional staple.